



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,485	10/25/2000	John Brian Pickering	GB9-1999-0107US1	3603

25299 7590 05/07/2003

IBM CORPORATION
PO BOX 12195
DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

MCFADDEN, SUSAN IRIS

ART UNIT	PAPER NUMBER
----------	--------------

2654

5

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/696,485

Applicant(s)

PICKERING, JOHN BRIAN

Examiner

Susan McFadden

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment A filed 2-7-03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

RESPONSE TO AMENDMENT

Response to Arguments

1. Applicant's arguments filed 2-7-03 with respect to claims 1-27 have been considered but are not persuasive.

Applicant has argued that Van Tichelen et al. do not show barge-in capability providing speech recognition on audio input to determine a corresponding text and performing lexical analysis to determine whether the text satisfies one or more conditions. In column 13, line 26 and Figure 4, Van Tichelen shows that the recognized input speech must undergo Natural Language Understanding and various tools (grammar tool, lexical tool inherently performing lexicon analysis) can be used on the words to see whether they fit certain conditions. The Examiner believes that one of ordinary skill in the art familiar with barge-in systems know that systems that accurately recognize words which satisfy desired conditions turn off the prompt being generated. Van Tichelen does say that there are 2 types of input: modal and non-modal. With modal internal prompts, a dialog cannot continue without input therefore a relevant user response must be supplied. With non-modal prompts, a dialog can continue without input.

The following rejections still exist:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-11,13-24 and 26-27, are rejected under 35 U.S.C. 102(e) as being anticipated by Van Tichelen et al. (6.311,159).

In regard to claims 1,7,14,20, and 27, Van Tichelen et al. show in Figure 2A, a method, medium, and system for speech recognition which: a) circuitry that plays a prompt to a user (item 21), b) circuitry that receives an audio input from a user while the prompt is being played (barge-in, col. 7-8), c) circuitry that performs speech recognition on the audio input to determine a corresponding text (ASR:automatic speech recognition, Col. 1, Fig. 4), d) circuitry that performs an analysis (including lexical) of the text to determine if it satisfies conditions (NLU,col. 13, Fig. 4), and which e) either terminate the playing of the prompt when conditions are satisfied or continuing the playing of the prompt (col. 14-col. 15, modal or non-modal, barge-in capabilities).

In regard to claims 2,8,15, and 21, the step of discarding said text is inherent when the internal timers time out (col. 15, ln 5-11).

In regard to claims 3,4,6,9,10,13,16,17,19,22,23, and 26, Van Tichelen et al. show that certain tools are used to check the accuracy of the spoken words (col 13, ln

Art Unit: 2654

40-50), based on acoustic parameters, which include a lexicon tool which could inherently check to see that the text satisfies a condition containing a predetermined word and a specific to the prompt being played out (speech understanding grammars).

In regard to claims 5,11,18, and 24, Van Tichelen et al. show that the voice processing system and user communicate with each other over a telephone network, whereby the prompt is played over a telephone and the audio is received over a telephone connection (col. 13, ln 10-25).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Tichelen et al. (6,311,159) in view of Garner et al. (6,427,134).

In regard to claims 12 and 25, Van Tichelen et al. show that the voice processing system and method above. They do not specifically show that a voice activity detector is used to discriminate between speech and noise. Garner et al. show a voice activity detector used in phone that discriminates between speech and noise (Abstract). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to add this feature because it provides the system with a more accurate input in noisy environments (col. 2, ln 10-15).

Conclusion


6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan McFadden whose telephone number is 703-308-6693. The examiner can normally be reached on Monday-Friday, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.


Susan McFadden
Primary Examiner
Art Unit 2654

May 1, 2003